VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued:** Coeburn-Norton-Wise Regional Wastewater Treatment Authority
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** Yes ☐ No X

3. **Provide the tax map parcel number for the land where the discharge is located.** 035371

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** ~3 acres

5. **What is the design average effluent flow of this facility?** 5.0 MGD
For industrial facilities, provide the max. 30-day average production level, include units:

In addition to the design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Yes X No ☐
If "Yes", please identify the other flow tiers (in MGD) or production levels:
6.0 MGD, 6.5 MGD, and 7.0 MGD

Please consider the following questions for both the flow tiers and the production levels (if applicable): Do you plan to expand operations during the next five years? Is your facility's design flow considerably greater than your current flow?

6. **Nature of operations generating wastewater:**
Treatment of Domestic Wastewater

100% of flow from domestic connections/sources
Number of private residences to be served by the treatment works: _____

____% of flow from non-domestic connections/sources

7. **Mode of discharge:** X Continuous ☐ Intermittent ☐ Seasonal
Describe frequency and duration of intermittent or seasonal discharges:

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**
X Permanent stream, never dry
____ Intermittent stream, usually flowing, sometimes dry
____ Ephemeral stream, wet-weather flow, often dry
____ Effluent-dependent stream, usually or always dry without effluent flow
____ Lake or pond at or below the discharge point
____ Other: _____

9. **Approval Date(s):**
O & M Manual 9/28/1992 **Sludge/Solids Management Plan** 1/27/2005

Have there been any changes in your operations or procedures since the above approval dates? Yes ☐ No X

VIRGINIA DEQ NO EXPOSURE CERTIFICATION
FOR EXCLUSION FROM VPDES STORM WATER PERMITTING

Submission of this **No Exposure Certification** constitutes notice that the entity identified below does not require permit authorization for its storm water discharges associated with industrial activity under the VPDES Permit Program due to the existence of a condition of **No Exposure**.

A condition of **No Exposure** exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the No Exposure exclusion. In addition, the exclusion from VPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the No Exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity below is certifying that a condition of No Exposure exists at its facility or site, and is obligated to comply with the terms and conditions at 9 VAC 25-31-120 E (the VPDES Permit Regulation).

Please Type or Print All Information. ALL INFORMATION ON THIS FORM MUST BE PROVIDED.

1. Facility Operator Information

Name: Coeburn-Norton-Wise Regional Wastewater Treatment Authority

Mailing Address: P.O. Box 1296

City: Norton State: VA Zip: 24273 Phone: (276) 679-7236

2. Facility/Site Location Information

Facility Name: Coeburn-Norton-Wise Regional Wastewater Treatment Plant

Address: 11550 Pine Camp Road

City: Coeburn State: VA Zip: 24230

County Name: Wise

Latitude: 36° 55' 37" Longitude: 82° 28' 16"

3. Was the facility or site previously covered under a VPDES storm water permit? Yes ☐ No X

If "Yes", enter the VPDES permit number: _____

4. SIC/Activity Codes: Primary: 4952 Secondary (if applicable): _____

5. Total size of facility/site associated with industrial activity: ~1 acres

6. Have you paved or roofed over a formerly exposed pervious area in order to qualify for the No Exposure exclusion? Yes ☐ No X

If "Yes", please indicate approximately how much area was paved or roofed. Completing this question does not disqualify you for the No Exposure exclusion. However, DEQ may use this information in considering whether storm water discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.

Less than one acre ☐ One to five acres ☐ More than five acres ☐

7. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" or "No" in the appropriate box.) **If you answer "Yes" to any of these questions (1) through (11), you are <u>not</u> eligible for the No Exposure exclusion.**

	Yes	No
(1) Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water	☐	X
(2) Materials or residuals on the ground or in storm water inlets from spill/leaks	☐	X
(3) Materials or products from past industrial activity	☐	X
(4) Material handling equipment (except adequately maintained vehicles)	☐	X
(5) Materials or products during loading/unloading or transporting activities	☐	X
(6) Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result in the discharge of pollutants)	☐	X
(7) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers	☐	X
(8) Materials or products handled/stored on roads or railways owned or maintained by the discharger	☐	X
(9) Waste material (except waste in covered, non-leaking containers [e.g., dumpsters])	☐	X
(10) Application or disposal of process wastewater (unless otherwise permitted)	☐	X
(11) Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow	☐	X

8. Certification Statement

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of no exposure and obtaining an exclusion from VPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under 9 VAC 25-31-120 E 2).

I understand that I am obligated to submit a No Exposure Certification form once every five years to the Department of Environmental Quality and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the Department, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under a VPDES permit prior to any point source discharge of storm water associated with industrial activity from the facility.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: Mark S. Hollyfield

Print Title: Executive Director

Signature: Mark Hollyfield

Date: 10/28/2011

For Department of Environmental Quality Use Only

Accepted/Not Accepted by: _____ Date: _____

PUBLIC NOTICE BILLING INFORMATION FORM

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in accordance with 9 VAC 25-31-290.C.2:

Agent/Department to be billed: **Coeburn-Norton-Wise Regional Wastewater Treatment Authority**

Owner: **Coeburn-Norton-Wise Regional Wastewater Treatment Authority**

Applicant's Address: **P.O. Box 1296**

Norton, VA 24273

Agent's Telephone No: **(276) 679-7236**

Authorizing Agent: _____
Signature

Mark S. Hollyfield
Printed Name

Executive Director
Title

Facility Name: **Coeburn-Norton-Wise Regional Wastewater Treatment Plant**

Permit No. **VA0077828**

Please return to: **Clarise R. Shaheen**
Department of Environmental Quality
Southwest Regional Office
355 Deadmore St.
Abingdon, VA 24212

Attachment 1

Process Descriptions
Form 2A, B.3

Coeburn-Norton-Wise Wastewater Treatment Plant
VPDES Permit VA0077828
Process Description

Current Process (Pre-Expansion):

The treatment capacity of the Coeburn-Norton-Wise (CNW) Wastewater Treatment Plant (WWTP) is currently 5.0 MGD. The influent has an average $CBOD_5$ concentration of 220 mg/L, a TSS concentration of 275 mg/L, and an ammonia concentration of 6.0 mg/L. Upon entering the WWTP, influent meets a mechanical bar screen which removes large solids before passing into an aerated grit removal channel to remove finer solids. Following grit removal, grease is skimmed off and the sewage flows into the influent pumping station.

The influent is then pumped to the outer channel of a three-channel oxidation ditch. Return activated sludge (RAS) is also added to the oxidation ditch at the same location to maintain a biomass concentration in the oxidation ditch of approximately 2,000 mg/L. The activated sludge biomass in the oxidation ditch provides the necessary treatment, by aerobic processes, to meet effluent water quality limits. Each channel of the oxidation ditch utilizes 6 aerators to provide both oxygen, for biological processes, and kinetic energy, to maintain suspension of solids. Flow passes through from the outer channel to the middle channel, and then from the middle channel to the inner channel via crossover ports in the channel walls. Activated sludge exits the oxidation ditch by means of an effluent weir in the inner channel and flows to a splitter box that evenly distributes the activated sludge to two secondary clarifiers.

The activated sludge flows around a channel on the outside edge of the clarifier and gravity feeds down into the clarifier via ports evenly distributed around the channel. The flow through these ports is forced downward by a baffle plate to facilitate the settling of the biomass in suspension and to limit the flow from short-circuiting. The biomass solids are settled to the bottom of the clarifier in a sludge blanket where they collected and pumped back to the oxidation ditch as RAS, or wasted to the solids digesters. Clarified water exits the secondary clarifiers by flowing over a weir into the effluent channel along the outer edge of the clarifier (parallel to the influent channel). Scum is also removed from the top of the clarified water, before it leaves the clarifier, and piped to a pit to be pumped to the solids digesters. The clarified water from both of the secondary clarifiers is then piped to a single point and chlorinated.

The clarifier effluent is then split between two chlorine contact tanks for disinfection. The non-potable water demand for the plant is fulfilled by three vertical turbine pumps pulling disinfected water from the chlorine contact tanks. Disinfected water from the two contact tanks is combined and excess chlorine is removed by the addition of sulfur dioxide. Treated effluent water is piped to the post aeration flumes to increase the dissolved oxygen content. The plant flow is then measured by a Parshall flume before being discharged into the Guest River.

Solids that have settled in the secondary clarifiers are used as RAS, but can also be wasted to the solids digesters, along with scum from other stages in the treatment process. The solids digesters use aerobic processes to further degrade the solids as a means of reducing the volume of waste solids produced by the plant. Waste leaving the digesters is separated into liquids, which are sent back to the plant influent, and solids, which are dried further for land application, disposal at a landfill, or composting.

Planned Process (Post Expansion):

The treatment capacity of the Coeburn-Norton-Wise (CNW) Wastewater Treatment Plant (WWTP) is to be upgraded to a design flow of 6.5 MGD. This upgrade is also to take into account a peak flow of 16.25 MGD that could potentially be seen during wet weather. The influent has an annual average $CBOD_5$ concentration of 220 mg/L, a TSS concentration of 275 mg/L, and an ammonia concentration of 6.0 mg/L. Sewage entering CNW first meets mechanical bar screens to remove large solids before passing into aerated grit removal channels to remove finer solids. As part of the plant upgrade, an additional bar screen and aerated grit removal unit are to be added for a total of two bar screens and two grit removal units. Following grit removal, grease is skimmed off and the sewage flows into the influent pumping station.

The influent is then pumped to the outer channel of a three channel oxidation ditch. Return activated sludge (RAS) is also added to the oxidation ditch at the same location to maintain a biomass concentration in the oxidation ditch of approximately 2,000 mg/L. The activated sludge biomass in the oxidation ditch provides the necessary treatment, by aerobic processes, to meet effluent water quality limits. In addition to the suspended biomass, IFAS fixed media units are to be placed in the middle channel of the oxidation ditch to provide additional biomass to the system as part of the expansion. Each channel of the oxidation ditch utilizes 6 aerators to provide both oxygen, for biological processes, and kinetic energy, to maintain suspension of solids. Flow passes through from the outer channel to the middle channel, and then from the middle channel to the inner channel via crossover ports in the channel walls. The existing secondary clarifiers are not capable of handling the peak flows that could potentially occur during wet weather. To accommodate the additional flow, the inner channel will be operated as a third secondary clarifier to prevent overloading the existing clarifiers after the expansion. The aeration units in the inner channel will be turned off, allowing the solids to settle in the inner channel. Up to 4.25 MGD will flow out of the inner channel via the wet weather effluent weir.

This clarified water will then flow to a new tertiary filter building. Biomass that has settled in the inner channel will be pumped back to the outer channel as RAS. This pumping system will also act as a recycle loop for future denitrification capabilities. Up to 12 MGD of activated sludge exits the oxidation ditch by means of an effluent weir in the middle channel and flows to a splitter box that evenly distributes the activated sludge to two secondary clarifiers. The activated sludge flows around a channel on the outside edge of the clarifier and gravity feeds down into the clarifier via ports evenly distributed around the channel. The flow through these ports is forced downward by an extended baffle plate to facilitate the settling of the biomass in suspension and to prevent the flow from short-circuiting. The biomass solids are settled to the bottom of the clarifier in a sludge blanket where they collected and pumped back to the oxidation ditch as RAS, or wasted to the solids digesters. Clarified water exits the secondary clarifiers by flowing over a weir into the effluent channel along the outer edge of the clarifier (parallel to the influent channel). Scum is also removed from the top of the clarified water, before it leaves the clarifier, and piped to a pit to be pumped to the solids digesters.

The clarified water from both of the secondary clarifiers is then piped to the tertiary filter building. Clarified water is pumped from a wet well into two Aqua Aerobic disk filter units for tertiary treatment. Backwash sludge from these filters is sent to the oxidation ditch as RAS. Filtered water flows to a new mixing vault where chlorine is added. The flow is then split between two chlorine contact tanks for

disinfection. The non-potable water demand for the plant is fulfilled by three vertical turbine pumps pulling disinfected water from the chlorine contact tanks. Disinfected water from the two contact tanks is combined and excess chlorine is removed by the addition of sulfur dioxide. Treated effluent water is piped to the post aeration flumes to increase the dissolved oxygen content. The plant flow is then measured by a Parshall flume before being discharged into the Guest River.

Solids that have settled in the secondary clarifiers are used as RAS, but can also be wasted to the solids digesters, along with scum from other stages in the treatment process. The solids digesters use aerobic processes to further degrade the solids as a means of reducing the volume of waste solids produced by the plant. Waste leaving the digesters is separated into liquids, which are sent back to the plant influent, and solids, which are dried further for land application, disposal at a landfill or composting.

Attachment 2

Summary of Biomonitoring Test
Form 2A, E.4

Coeburn-Norton-Wise Wastewater Treatment Plant
VPDES Permit VA0077828
E.4 Summary of Submitted Biomonitoring Test Information
Outfall 001

Event	Dates	Vertebrate (*P. promelas*)	NOEC	TU_C (100/NOEC)	NOAEC[1]	TUa (100/NOAEC)
1st Annual	8/2008	X	100%	1.00	100%	1.00
2nd Annual	8/2009	X	100%	1.00	100%	1.00
3rd Annual	8/2010	X	100%	1.00	100%	1.00
4th Annual	8/2011	X	100%	1.00	100%	1.00

Note: (1) NOAEC results from chronic test 48-hour survival data

Attachment 3

Amount Received from Off-Site Sludge Application, Section B.2

Facilities Hauling Digester Contents to Coeburn-Norton-Wise Regional WWTP

Facility Name: VA Department of Corrections Unit #18 STP
Contact Person: J.J. Burnett
Title: Superintendent
Phone: (276) 395-2384
Mailing Address (street or P.O. Box): P.O. Box 1198
City or Town: Coeburn State: VA Zip: 24230
Total dry metric tons per 365-day period received from this facility: varies
Facility Address: Route 72, Coeburn, VA 24230
Facility has aerobic digestion

Facility Name: USFS Flatwoods Job Corp STP
Contact Person: Jerome Kern
Title: Operator
Phone: (276) 395-3384
Mailing Address (street or P.O. Box): 2803 Dungannon Road
City or Town: Coeburn State: VA Zip: 24230
Total dry metric tons per 365-day period received from this facility: varies
Facility Address: Route 72, Coeburn, VA 24230
Facility has aerobic digestion

Facility Name: Appalachia Elementary School STP
Contact Person: Robert Summers
Title: Principal
Phone: (276) 565-1115
Mailing Address (street or P.O. Box): P.O. Box 430
City or Town: Appalachia State: VA Zip: 24216
Total dry metric tons per 365-day period received from this facility: varies
Facility Address: 3965 Kent Junction Road, Appalachia, VA 24216
Facility has aerobic digestion

Facility Name: Town of Coeburn Sheffield Acres STP
Contact Person: Loretta Mays
Title: Manager
Phone: (276) 395-3323
Mailing Address (street or P.O. Box): P.O. Box 370
City or Town: Coeburn State: VA Zip: 24230
Total dry metric tons per 365-day period received from this facility: varies
Facility Address: Route 72, Coeburn, VA 24230
Facility has aerobic digestion

Attachment 4

Sludge Analysis Reports
Sludge Application, Section C.7

EMI

Environmental Monitoring, Incorporated
P.O. Box 1190 * Norton, VA 24273
Environmental Consultants and Analytical Laboratories

Certificate of Analysis

Client Name: C.N.W. Authority
Address: PO Box 1296
Address: Norton, VA 24273

Report Date: 04/18/11
Lab Sample No.: **1092058**
Client No: 662
EMI Project No.: 2

Sample Identification: Composite of 7 Samples
Site Description: NO. 1 DIGESTER 2, 8

Date Collected: 02/07/11
Time Collected: 0

Results Reported on a Dry Weight Basis

Collected By: M SMITH
Sample Matrix: Non-Aqueous

Parameter	Sample Result	Units	MDL	Method	Date Analyzed	Time Analyzed	Analyst
Alkalinity	224.7	mg/kg	56.2	310.1	2/18/2011	2045	MCF
Ammonia, Nitrogen	2610.0	mg/kg-N	10.0	4500-NH3 C	2/21/2011	844	JM
Nitrate	758.0	mg/kg-N	4.72	300.0	2/15/2011	1348	TAY
Phosphorus, Total	132646	mg/kg	94	SM 4500 PBE	2/21/2011	1030	NCC
Solids, Percent	17.8	%		160.3	2/21/2011	1415	TCT
Total Kjeldahl Nitrogen	44200	mg/kg-N	10.00	4500N	2/21/2011	844	JM
Total Moisture	82.2	%	1.0	ASTM D2974-87	2/11/2011	1545	TCT
Coliform, Fecal	2783	MPN/g	2.0	9221E	2/7/2011	1630	RSV
Arsenic, Total	BDL	mg/kg	1.180	6010B	2/22/2011	1427	NCC
Cadmium, Total	1.573	mg/kg	0.281	6010B	2/22/2011	1427	NCC
Copper, Total	229.2	mg/kg	0.039	6010B	2/22/2011	1427	NCC
Lead, Total	39.44	mg/kg	1.573	6010B	2/22/2011	1427	NCC
Mercury, Total	1.05	mg/kg	0.0084	245.1 REV.3	2/14/2011	1649	TCT
Molybdenum, Total	7.58	mg/kg	0.449	6010B	2/22/2011	1427	NCC
Nickel, Total	19.83	mg/kg	0.618	6010B	2/22/2011	1427	NCC
Potassium, Total	3590	mg/kg	12.53	6010B	2/25/2011	1418	NCC
Selenium, Total	3.66	mg/kg	0.337	6010B	2/24/2011	1349	NCC
Zinc, Total	725	mg/kg	0.225	6010B	2/22/2011	1427	NCC

MDL - Method Detection Limit
BDL - Below Detection Limit

CERTIFICATE REISSUE

This Certificate is intended to replace a previous issue for the same sample number dated: 3/10/11

Reissue Authorized by:

Voice (276) 679-6544 Fax (276) 679-6549 www.emilab.com

ENVIRONMENTAL MONITORING, INCORPORATED
ENVIRONMENTAL CONSULTANTS ▲ ANALYTICAL LABORATORIES
P.O. BOX 1190 ▲ NORTON, VIRGINIA 24273 ▲ 276/679-6544

Certificate of Analysis

Client Name: C.N.W. AUTHORITY
Address: P.O. BOX 1296
NORTON, VA 24273

Report Date: 03/10/11
Lab Sample No.: **1092058**
Client No.: 662
EMI Project No.: 2

Sample Identification: SLUDGE COMPOSITE

Site Description: NO.1 DIGESTER SLUDGE CAKE

Date Collected: 02/07/11
Time Collected: 0
Sample Matrix: NAQ
Collected By: M SMITH

Parameter	Sample Result	Units	MDL	RL	Method	Date Analyzed	Time Analyzed	Analyst
	Results Reported as Received Unless Otherwise Stated							
Alkalinity	40.0	mg/kg	10.0	10.0	EPA 310.1	2/18/2011	2045	MCF
Nitrate	135	mg/kg - N	0.840	20.0	EPA 300.0	2/15/2011	1348	TAY
pH	6.60	STD			SW846-9045	2/14/2011	2035	MCF
Phosphorus, Total	23611	mg/kg	16.8	62.5	SM 4500 PBE	2/21/2011	1030	NCC
Solids, Percent	17.8	%			EPA 160.3	2/21/2011	1415	TCT
Total Moisture	82.2	%	1.00		ASTM D2974-87	2/11/2011	1545	TCT
Coliform, Fecal (Dry Weight Basis)	2783	MPN/g	2.00	2.00	SM , 9221E	2/7/2011	1630	RSV
Arsenic, Total	BDL	mg/kg	0.210	3.00	SW846-6010B	2/22/2011	1427	NCC
Cadmium, Total	0.280 J	mg/kg	0.050	3.00	SW846-6010B	2/22/2011	1427	NCC
Copper, Total	40.8	mg/kg	0.0070	0.100	SW846-6010B	2/22/2011	1427	NCC
Lead, Total	7.02	mg/kg	0.280	3.00	SW846-6010B	2/22/2011	1427	NCC
Mercury, Total	0.186	mg/kg	0.0015	0.025	EPA 245.1-REV 3	2/14/2011	1649	TCT
Molybdenum, Total	1.35 J	mg/kg	0.080	3.00	SW846-6010B	2/22/2011	1427	NCC
Nickel, Total	3.53	mg/kg	0.110	3.00	SW846-6010B	2/22/2011	1427	NCC
Potassium, Total	639	mg/kg	2.23	10.0	SW846-6010B	2/25/2011	1418	NCC
Selenium, Total	0.652 RR	ug/kg	60.0	300	SW846-6010B	2/24/2011	1349	NCC
Zinc, Total	129	mg/kg	0.040	3.00	SW846-6010B	2/22/2011	1427	NCC

Flow if Available (GPM):
Temp. if Available (C):
Depth if Available (ft):
Analysis Package Code: A40

Type of Sample: Grab
BDL = Below Detection Limit
FLD = Field Technician
SCRLP

IV - Flag indicates insufficient Sample Volume
J - Flag indicates estimated value below Report Limit
T - Results indicate possible toxicity which is expected to influence reported value.
NA -A result for this analyte is not available.
MI - Matrix Interference - Final result may not be representative.
BQ = Batch QC Outside Acceptable Range
HE = Parameter Hold Time Exceeded
FC = Failure to Comply Current SOP
R = Sample results rejected because of gross deficiencies in QC or method performance .

Attachment 5

Landowner Agreement Form
Sludge Application, Section C.10

FACILITY NAME: Coeburn-Norton-Wise (C-N-W)Regional WWTP VPDES PERMIT NUMBER: VA0077828

SEWAGE SLUDGE APPLICATION AGREEMENT

This sewage sludge application agreement is made on this date August 15, 2007 between Jimmy Vanover, referred to here as "landowner", and C-N-W, referred to here as the "Permittee".

Landowner is the owner of agricultural land shown on the map attached as Exhibit A and designated there as PL-2 Jimmy Vanover ("landowner's land"). Permittee agrees to apply and landowner agrees to comply with certain permit requirements following application of sewage sludge on landowner's land in amounts and in a manner authorized by VPDES permit number VA0077828 which is held by the Permittee.

Landowner acknowledges that the appropriate application of sewage sludge will be beneficial in providing fertilizer and soil conditioning to the property. Moreover, landowner acknowledges having been expressly advised that, in order to protect public health, the following site restrictions must be adhered to when sewage sludge receives Class B treatment for pathogen reduction:

1. Food crops with harvested parts that touch the sewage sludge/soil mixture and are totally above the land surface shall not be harvested for 14 months after application of sewage sludge;

2. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of sewage sludge when the sewage sludge remains on the land surface for four months or longer prior to incorporation into the soil;

3. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of sewage sludge when the sewage sludge remains on the land surface for less than four months prior to incorporation into the soil;

4. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of sewage sludge;

5. Animals shall not be grazed on the land for 30 days after application of sewage sludge;

6. Turf grown on land where sewage sludge is applied shall not be harvested for one year after application of the sewage sludge when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by the State Water Control Board;

7. Public access to land with a high potential for public exposure shall be restricted for one year after application of sewage sludge;

8. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of sewage sludge.

9. Tobacco, because it has been shown to accumulate cadmium, should not be grown on landowner's land for three years following the application of sewage sludge borne cadmium equal to or exceeding 0.5 kilograms/hectare (0.45 pounds/acre).

Permittee agrees to notify landowner or landowner's designee of the proposed schedule for sewage sludge application and specifically prior to any particular application to landowner's land. This agreement may be terminated by either party upon written notice to the address specified below.

Landowner:
Jimmy R Vanover
Signature

8166 Bacchus Rd Wise VA
Mailing Address 24293

Permittee: COEBURN - NORTON - WISE REGIONAL WASTE WATER TREATMENT AUTHORITY By:
Mark Heldfiel, EXECUTIVE DIRECTOR
Signature

P.O. Box 1296, Norton, Virginia 24273
Mailing Address